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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,522	03/26/2001	Daniel W. Van Vleet	1752	7905
24264	7590	10/19/2004	EXAMINER	
TIMOTHY J MARTIN, PC 9250 W 5TH AVENUE SUITE 200 LAKEWOOD, CO 80226				ODLAND, KATHRYN P
		ART UNIT		PAPER NUMBER
		3743		

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/817,522	VAN VLEET, DANIEL W.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kathryn Odland	3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10 June 2004.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-6,8-28 and 30-34 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-6 and 8-28 and 30-34 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Response to Amendment***

This is a response to the amendment dated June 10, 2004. Claims 1-6 and 8-28 and 30-34 are under consideration. Claim 29 was cancelled.

### ***Specification***

The amendment to the specification is acknowledged and accepted.

### ***Response to Arguments***

1. Applicant's arguments filed June 10, 2004 regarding claims 1-6 and 8-23, 28 and 32 have been fully considered but they are not persuasive.

Regarding claims 1, 17 and 34, applicant argues, "Thurlow does not teach a spacer interposed between the fire pan and the base. The word 'interposed' is defined as in The American Heritage Dictionary of the English Language as:

- 1a. To insert or introduce between parts.
- 2a. To place (oneself between others or things.)

Further applicant states, "Legs 11a simply cannot be inserted, introduced, or placed between that which it already forms an integral part thereof." However, the examiner respectfully disagrees. "Interposed" is also defined as: To come between according to The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company. Page 4 of Thurlow states, "Also, the tray 11 stands on legs 11a with the burner head being accommodated in the space between the tray and the bottom of legs 11a." Thus, the legs 11a necessarily come between the fire pan and the base. The legs are inserted (at some point of the manufacturing/assembly

process) between the parts (i.e. fire pan and the base). Thus, the rejection is maintained since Thurlow discloses all claim limitations and applicant has failed to provide structural features that define over the prior art rejection.

Regarding claim 12, applicant argues, "Applicant respectfully disagrees with the Examiner's position that claim 12 is anticipated by Thurlow because the reference does not directly or implicitly teach a fire pan and a base that are "of substantially the same size and shape." The term substantially is extraordinarily broad and the scope of substantial has not been established. Thus, that shown by Thurlow can be considered "**substantially** the same size and shape." Further, that shown in figure 2 can be construed as "**substantially** the same size and shape."

Regarding claims 15 and 23, applicant argues, Thurlow does not disclose a base shell and a "base interior." However, the examiner respectfully disagrees and there most necessarily is a "base interior." The examiner most certainly has not referenced the "base interior" as the "spacer." The interior space was referenced as the "base interior" as clearly shown in figure 2. Moreover, applicant argues hindsight reasoning in the combination of Thurlow with either Hait and/or Goerl. However, the examiner respectfully disagrees, for it has been held that it involves only routine skill in the art to make something that was once integral separable. Moreover, there is an entire subclass directed to knockdown/separable campfire apparatuses. Therefore, it is extremely well known and obvious to one with ordinary skill in the art to have the pieces be securable to one another. Also, at some point of the manufacturing process they were secured.

Regarding claims 28 and new claim 36, applicant argues, that since the device of Thurlow is not a cooking apparatus it would not be obvious to modify it to have a lid. However, there are many non-cooking fires that have lids. Applicant argues, "A lid would serve no usefulness to the apparatus once disposed as such." However, the examiner respectfully disagrees. A lid could be used for mere storage and transportation in order to keep inside contents in such as shown in Goerl.

Applicant has failed to provide structural limitations to define over the prior art rejection.

2. Applicant's arguments with respect to claims 24-27, 29-31 and 33 have been considered but are moot in view of the new ground(s) of rejection. In view of the claim amendments, the rejection was changed from a 35 U.S.C. 102(b) rejection to a 35 U.S.C. 103(a) rejection.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 8-12, 32, 34 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Thurlow in GB 2 228 791.

Regarding claim 1, Thurlow discloses a campfire apparatus adapted to be placed in an assembled state on a support surface and connected to a source of fuel having a base (that shown by horizontal lines below elements 11a in figure 2) adapted to rest on

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the support surface when in the assembled state; a fire pan (11) adapted to be supported by the base when in the assembled state, the fire pan including a main body portion having an inner surface, an upper rim and a pan interior, as seen in figure 2; a spacer (11a) adapted to be interposed between the fire pan and the base when in the assembled state so that the base supports the spacer and the spacer supports the fire pan; a gas manifold (such as 7, 7e) disposed in the fire pan when in the assembled state, and having at least one gas outlet (8) operative to introduce vaporized fuel into the pan interior when connected to the source of fuel, as seen in figures 2 and 11; and a quantity of low-density, non-flammable particulate material adapted to be disposed in the fire pan at a depth sufficient to cover the gas manifold when in the assembled state, as recited on page 2, lines 1-3. Applicant's attention is also drawn to page 1, lines 1-10 and page 4.

Regarding claim 2, Thurlow discloses that as applied to claim 1, as well as, a connector (such as 1 and associated components, etc.) associated with the gas manifold and adapted to connect to the source of fuel when in an assembled state.

Regarding claim 3, Thurlow discloses that as applied to claim 1, as well as, particulate material that is selected from a group consisting of clay, shale, slate, and slag particles, zeolites, alumina hydrates, borates, perlite, vermiculite, beach sand, volcanic sand and sandblasting sand, as recited on pages 1 and 2.

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Regarding claims 4 and 35, Thurlow discloses that as applied to claims 1 and 35, as well as, particulate material that is vermiculite, as recited on page 2.

Regarding claim 8, Thurlow discloses that as applied to claim 1, as well as, a gas manifold that has a selected size and a shape selected from a group consisting of toroidal, serpentine, linear and linearly angled shapes, as seen in figures 2-11.

Regarding claim 9, Thurlow discloses that as applied to claim 1, as well as, a gas manifold that is shaped so as to extend circumjacent to the inner surface of the fire pan when in the assembled state and operative when connected to a source of fuel to direct vaporized fuel laterally toward an axis that is perpendicular to the plane containing the rim of the fire pan, as seen in figures 2-11, as shown in the placement of ports 8.

Regarding claim 10, Thurlow discloses that as applied to claim 9, as well as, a plurality of ports (8) formed in spaced apart relation to one another around the gas manifold thereby to define a plurality of gas outlets therefor, as seen in figures 2-11.

Regarding claim 11, Thurlow discloses that as applied to claim 1, as well as, a fire pan that is configured as a geometric shell selected from a group consisting of: a portion of a spherical shell, a truncated pyramidal shell, a rectangular parallelepiped shell, a polyhedral shell, a conical shell, a cylindrical shell and a pyramidal shell, as recited on pages 5 and 6 as well as the abstract.

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Regarding claim 12, Thurlow discloses that as applied to claim 11, as well as, a fire pan (11) and the base (that below 11a of figure 2) are of substantially the same size and shape, as seen in figure 2.

Regarding claim 32, Thurlow discloses a campfire apparatus adapted to be placed in an assembled state on a support surface and connected to a source of fuel having a base (that shown below element 11a in figure 2) adapted to rest on the support surface when in the assembled state, the base having a central base axis; a fire pan (11), securable to the base and adapted to be supported by the base when in the assembled state, the fire pan including a main body portion having an inner surface and an aperture formed therethrough, an upper rim, and a pan interior; a gas outlet received by the aperture in the fire pan that is operative to introduce vaporized fuel into the pan interior when connected to the source of fuel; and a quantity of low-density, non-flammable particulate material disposed in the fire pan, as recited throughout the specification and figures, with emphasis on pages 1, lines 1-10, page 2, lines 1-3, page 4 and seen in figures 1-11.

Regarding claim 34, Thurlow discloses a campfire apparatus adapted to be placed in an assembled state on a support surface and connected to a source of fuel having a base (that shown below element 11a in figure 2) adapted to rest on the support surface when in the assembled state, the base having a selected geometric size and shape; a fire pan

(11) having a substantially similar geometric size and shape as the base, the fire pan including a main body portion having an inner surface and a pan interior; a spacer (11a) adapted to be interposed between the fire pan and the base when in the assembled state so that the base supports the spacer and the spacer supports the fire pan; a gas manifold (such as 7 and associated components) disposed in the fire pan (11) when in the assembled state and having at least one gas outlet (8) operative to introduce vaporized fuel into the pan interior when connected to the source of fuel; and a quantity of low-density, non-flammable particulate material adapted to be disposed in the fire pan at a depth sufficient to cover the gas manifold when in the assembled state, as recited throughout the specification and figures, with emphasis on pages 1, lines 1-10, page 2, lines 1-3, page 4 and seen in figures 1-11.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 6, 13-18, 20-31, 33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thurlow in GB 2 228 791 in view of Hait in US Patent No. 5,359,988 and/or Goerl in Us Patent No. 2,154,305.

Regarding claims 5 and 20, Thurlow discloses that as applied to claim 1 and, as modified, that as applied to claim 15. However, Thurlow does not explicitly recite a lid sized and adapted to enclose the pan interior when placed thereon in a mounted state,

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with a portion of the lid being supported by a portion of the main body. On the other hand, Hait and Goerl teach a lid sized and adapted to enclose the pan interior when placed thereon in a mounted state, with a portion of the lid being supported by a portion of the main body. Therefore, it would be obvious to one with ordinary skill in the art to include a lid, as taught by Hait and Goerl for the purpose of enclosing the pan interior.

Regarding claims 6, 21, and 29 as modified Thurlow discloses that as applied to claims 5, 20, and 28. Further, Hait and Goerl teach an upper rim that extends continuously around the fire pan and including a projecting shoulder portion disposed on the upper rim, the shoulder portion operative to support the lid when the lid is in the mounted state. Therefore, it would be obvious to one with ordinary skill in the art to further modify the invention of Thurlow to provide an upper rim that extends continuously around the fire pan and include a projecting shoulder portion disposed on the upper rim, the shoulder portion operative to support the lid when the lid is in the mounted state, as taught by Hait and Goerl for the purpose of supporting the lid. It would further be obvious to have the shoulder project inward for the purpose of more discreet function.

Regarding claim 13, Thurlow discloses that as applied to claim 12. However a lid sized and adapted to enclose the pan interior when placed thereon in a mounted state with a portion of the lid being supported by a portion of the main body, and wherein the lid has substantially the same geometric structure as the fire pan and the base has not been explicitly recited. On the other hand, Hait and Goerl teach a lid sized and adapted to

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enclose the pan interior when placed thereon in a mounted state with a portion of the lid being supported by a portion of the main body, and wherein the lid has substantially the same geometric structure as the fire pan and the base. Therefore, it would be obvious to one with ordinary skill in the art to modify the invention of Thurlow to include a lid as taught by Hait and Goerl for the purpose of enclosing the fire pan.

Regarding claim 14, Thurlow discloses that as applied to claim 1. However, Thurlow does not recite an upper rim that extends in a plane parallel to the support surface when in an upright position, and when in a tipped-over position, the plane of the upper rim is oriented at no less than ninety degrees to the support surface. On the other hand, Hait teaches an upper rim that extends in a plane parallel to the support surface when in an upright position, and when in a tipped-over position, the plane of the upper rim is oriented at no less than ninety degrees to the support surface, given the construction shown in figure 6. Therefore, it would be obvious to one with ordinary skill in the art to modify the invention of Thurlow to include an upper rim that extends in a plane parallel to the support surface when in an upright position, and when in a tipped-over position, the plane of the upper rim is oriented at no less than ninety degrees to the support surface, as taught by Hait for the purpose of increasing safety and preventing tipping from spilling the material inside.

Regarding claim 15, Thurlow discloses a portable camping stove adapted to be placed on a support surface and connect to a source of fuel having a base (that shown below

elements 11a in figure 2) adapted to rest on a support surface, the base constructed as a base shell with a lower rim so as to have a base interior (that above it), the base having a selected geometric configuration and size, as seen in figure 2; a fire pan (11) including a main body portion constructed as a fire pan shell with an upper rim so as to have a pan interior, the fire pan shell having a selected geometric configuration and size; and a gas manifold (such as 7 and associated components) disposed in the pan interior and having at least one gas outlet (8) operative to introduce vaporized fuel into the pan interior when connected to the source of fuel, as discussed throughout the specification and seen in figures 2-11. However, Thurlow does not recite a base and fire pan being securable to one another so that the base interior and the pan interior are oppositely opening. On the other hand, Hait and Goerl teach a base and fire pan being securable to one another so that the base interior and the pan interior are oppositely opening. Therefore, it would be obvious to one with ordinary skill in the art to modify the invention of Thurlow to have a base and fire pan being securable to one another so that the base interior and the pan interior are oppositely opening, as taught by Hait and Goerl for the purpose of ease of manufacturing and compact storage.

Regarding claim 16, Thurlow, as modified, discloses that as applied to claim 15, as well as, a connector (such as 1 and associated components) associated with the gas manifold and adapted to connect to a source of fuel.

Regarding claim 17, Thurlow, as modified, discloses that as applied to claim 15, as well as, a spacer (via 11a) having a hollow interior and interposed between the base and the fire pan, as recited on page 4 and seen in figure 2.

Regarding claim 18, Thurlow, as modified, discloses that as applied to claim 15, as well as, a fire pan that has a central pan axis and the base has a central base axis, the base and the fire pan secured together such that the central base axis and the central pan axis are co-linear, as seen in figure 2.

Regarding claim 22, Thurlow, as modified, discloses that as applied to claim 15, as well as, a plurality of ports (8) formed in spaced-apart relation to one another around the gas manifold thereby to define a plurality of gas outlets therefor, as seen in figures 2-11.

Regarding claim 23, Thurlow discloses a portable camping stove adapted to be placed on a support surface and connect to a source of fuel having a fire pan (11) including a main body portion constructed as a fire pan shell having a central pan axis and with an upper rim and a pan interior, the fire pan shell having a selected geometric configuration and size; a base (that shown below element 11a in figure 2) operative to rest on the support surface, the base constructed as a base shell having a central base axis and with a lower rim and a base interior, the base shell having the selected geometric configuration and size, the base; a spacer (11a) formed as a hollow connector and interposed between the fire pan and the base such that when connected together, the

central pan axis and the central base axis are co-linear and the pan interior and the base interior are in an opposed relationship; a gas manifold (such as 7, etc.) disposed in the interior of the fire pan and having at least one gas outlet (8) operative to introduce vaporized fuel into the interior of the fire pan when connected to the source of fuel; a connector (such as 1 and associated components) associated with the gas manifold (such as 7, etc.) and adapted to connect to the source of fuel; and a quantity of low density, fire-retardant material disposed in the fire pan at a depth sufficient to cover the gas manifold, as recited throughout the specification with emphasis on page 1, lines 1-10, page 2, lines 1-5, page 4, and seen in figures 2-11. However, Thurlow does not explicitly recite a lid constructed as a lid shell having the selected geometric configuration and size. On the other hand, Hait and Goerl teach a lid. Thus, it would be obvious to one with ordinary skill in the art to modify the invention of Thurlow to include a lid as taught by Hait and Goerl for the purpose of enclosing the pan.

Regarding claim 24, Thurlow discloses a campfire apparatus adapted to be placed in an assembled state on a support surface having a base (such as that shown below 11a in figure 2) adapted to rest on the support surface when in the assembled state; a fire pan (11) adapted to be supported by the base when in the assembled state, the fire pan including a main body portion having an inner surface, an upper rim and a pan interior; a reservoir (via 1 and associated components) adapted to provide a source of fuel; a gas manifold (such as 7 and associated components) adapted to be disposed in the pan interior when in the assembled state, and having at least one gas outlet (8)

operative to introduce vaporized fuel into the pan interior when connected to the source of fuel; and vermiculite adapted to be disposed in the fire pan at a depth sufficient to cover the gas manifold when in the assembled state, as recited on page 2, lines 1-3 and seen in figures 2-11. Applicant's attention is also drawn to page 1, lines 1-10 and page 4. However, Thurlow does not *explicitly* recite a base and fire pan adapted to be releasably secured. On the other hand, Hait and Goerl teach a base and fire pan being securable to one another so that the base interior and the pan interior are oppositely opening. Therefore, it would be obvious to one with ordinary skill in the art to modify the invention of Thurlow to have a base and fire pan being securable to one another so that the base interior and the pan interior are oppositely opening, as taught by Hait and Goerl for the purpose of ease of manufacturing and compact storage. Further, it has been held that it involves only routine skill in the art to make something that was formerly integral separable. Moreover, at some point during manufacturing they are secured and can be unsecured by some means.

Regarding to claim 25, Thurlow discloses a method of providing an artificial campfire on a support surface, via providing a fire pan (11) having an interior and wherein the fire pan includes a gas manifold (such as 7 and associated components) disposed in the interior thereof with the manifold having at least one gas outlet (8) operative to introduce vaporized fuel into the interior of the fire pan; positioning the fire pan in spaced relation above a base (such as that shown below element 11a in figure 2) support disposed on the support surface such that the interior of the fire pan is upwardly opening; placing a

quantity of low density, fire retardant particulate material in the fire pan at a depth sufficient to cover the gas manifold thereby to achieve a surface spaced completely above the gas manifold, as recited on pages 1 and 2; introducing a fuel into the gas manifold at a pressure sufficient so that vaporized fuel is injected into the particulate material in a manner whereby the vaporized fuel migrates upwardly therethrough without igniting until it reaches the surface; and igniting the vaporized fuel along the surface of the particulate material, as recited throughout the specification.

However, Thurlow does not *explicitly* recite a base and fire pan adapted to be releasably secured. On the other hand, Hait and Goerl teach a base and fire pan being securable to one another so that the base interior and the pan interior are oppositely opening. Therefore, it would be obvious to one with ordinary skill in the art to modify the invention of Thurlow to have a base and fire pan being securable to one another so that the base interior and the pan interior are oppositely opening, as taught by Hait and Goerl for the purpose of ease of manufacturing and compact storage. Further, it has been held that it involves only routine skill in the art to make something that was formerly integral separable. Moreover, at some point during manufacturing they are secured and can be unsecured by some means.

Regarding claim 26, Thurlow as modified discloses that as applied to claim 25, as well as, particulate material that is selected from a group consisting of clay, shale, slate, and slag particles, zeolites, alumina hydrates, borates, perlite, vermiculite, beach sand, volcanic sand and sandblasting sand, as recited on page 2, lines 1-3.

Regarding claim 27, Thurlow as modified discloses that as applied to claim 24, as well as particulate material that is vermiculite, as recited on page 2, lines 1-3.

Regarding claim 28, Thurlow discloses a campfire apparatus adapted to be placed in an assembled state on a support surface connected to a source of fuel having a base (that shown below element 11a in figure 2) adapted to rest on the support surface when in the assembled state; a fire pan (11) adapted to be supported by the base when in the assembled state, the fire pan including a main body portion having an inner surface, an upper rim, and a pan interior; a gas manifold in the fire pan when in the assembled state and having at least one gas outlet operative to introduce vaporized fuel into the pan interior when connected to the source of fuel; and a quantity of low-density, non-flammable particulate material adapted to be disposed in the fire pan at a depth sufficient to cover the gas manifold when in the assembled state, as recited throughout the specification with emphasis on page 1, lines 1-10, page 2, lines 1-5, page 4, and seen in figures 2-11. However, Thurlow does not explicitly recite a lid sized and adapted to enclose the pan interior when in the assembled state, with a portion of the lid being supported by a portion of the main body. On the other hand, Hait and Goerl teach a lid. Thus, it would be obvious to one with ordinary skill in the art to modify the invention of Thurlow to include a lid as taught by Hait and Goerl for the purpose of enclosing the pan.

Regarding claim 30, Thurlow discloses a campfire apparatus adapted to be placed in an assembled state on a support surface and connected to a source of fuel having a base (that shown below element 11a in figure 2) adapted to rest on the support surface when in the assembled state; a fire pan (11) adapted to be supported by the base when in the assembled state, the fire pan including a main body portion having an inner surface, an upper rim and a pan interior; a gas manifold (such as 7 and associated components) disposed in the fire pan (11) when in the assembled state, and having at least one gas outlet (8) operative to introduce vaporized fuel into the pan interior when connected to the source of fuel and shaped so as to extend circumjacent to the inner surface of the fire pan when in the assembled state and operative when connected to a source of fuel to direct vaporized fuel laterally toward an axis that is perpendicular to the plane containing the rim of the fire pan, as seen in figures 2-11; and a quantity of low-density, non-flammable particulate material adapted to be disposed in the fire pan at a depth sufficient to cover the gas manifold when in the assembled state, as recited throughout the specification, with emphasis on pages 1, lines 1-10, page 2, lines 1-3, page 4, and figures 2-11. However, Thurlow does not explicitly recite a lid. On the other hand, Hait and Goerl teach a lid. Thus, it would be obvious to one with ordinary skill in the art to modify the invention of Thurlow to include a lid as taught by Hait and Goerl for the purpose of enclosing the pan for transportation and/or storage. Moreover, given this modification a rim and shoulder is within the scope and obvious to one with ordinary skill.

Regarding claim 31, Thurlow as modified discloses that as applied to claim 30 including a plurality of ports (8) formed in spaced apart relation to one another around the gas manifold thereby to define a plurality of gas outlets therefor, as seen in figures 2-11.

Regarding claim 33, Thurlow discloses a campfire apparatus adapted to be placed in an assembled state on a support surface and connected to a source of fuel having a base (that shown below element 11a in figure 2) adapted to rest on the support surface when in the assembled state; a fire pan (11) adapted to be supported by the base when in the assembled state, the fire pan including a main body portion having an inner surface, an upper rim and a pan interior; a gas manifold (such as 7 and associated components) disposed in the fire pan when in the assembled state and having at least one gas outlet (8) operative to introduce vaporized fuel into the pan interior when connected to the source of fuel; and a quantity of vermiculite adapted to be disposed in the fire pan at a depth sufficient to cover the gas manifold when in the assembled state, as recited throughout the specification and figures, with emphasis on pages 1, lines 1-10, page 2, lines 1-3, page 4 and seen in figures 1-11. As discussed above, Thurlow discloses a spacer 11a. It would be obvious to one with ordinary skill in the art to have the spacer be detachable as taught by Hait and Goerl for the purpose of compact storage, etc. It has been held that it involves only routine skill in the art to make something formerly integral separable. Further, the pieces can actually be detached.

Regarding claim 36, the limitations have all been discussed above.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thurlow in GB 2 228 791.

Regarding claim 19, Thurlow, as modified, discloses that as applied to claim 18. However, at least one bolt interconnecting the fire pan and the base, the bolt passing through the interior of the spacer has not been recited. On the other hand, a bolt is an extremely well known attachment technique and it would be obvious to one with ordinary skill in the art to employ bolted attachments.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

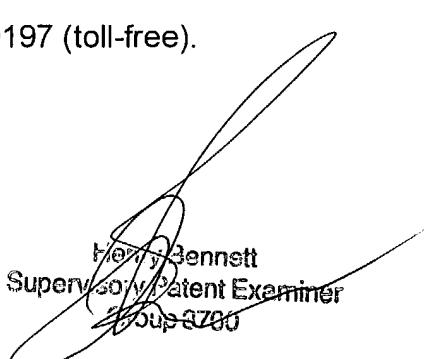
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathryn Odland whose telephone number is (703) 306-3454. The examiner can normally be reached on M-F (7:30-5:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A Bennett can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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